Gerald Amiel Ballena

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Professional Summary

Detail-oriented and methodical professional with a strong academic background in Bioinformatics, Evolution, and Molecular Biology. Experienced in documenting technical reports, academic papers, and bioinformatics pipelines. Skilled in ensuring clarity, accuracy, and alignment with scientific standards. Strong problem-solving ability with a focus on precision and consistency. Adept at collaborating with multidisciplinary teams to meet high standards of quality in technical and academic writing.

Experience

2024 🗆 Present

Project Technical Specialist

University of the Philippines, College of Public Health

- O Developed and proofread technical documentation and reports for bioinformatics research.
- Ensured that written reports were scientifically accurate and met publication standards.
- Reviewed and proofread large datasets and results to ensure accuracy before publication.

Education

University of the Philippines Diliman.

Graduated: July 2022

Thesis: In silico assessment of the association of pathogenicity and metal-resistance potential of *Fusarium* spp. Pre-print Link

Accomplishments: DOST ASTHRDP-Scholarship

Calculated Effective GPA (MS): 1.72

University of the Philippines Baguio.

Graduated: June 2018

Thesis: Bioelectrocatalysis by Novel Electrogenic Alkaliphilic Bacteria *Bacillus* sp. BAB-3442 Using Dual-Chambered Microbial Fuel Cell Poster Presentation (PSM 47)

Skills

Technical Skills

Proofreading: Strong attention to detail with a focus on scientific accuracy in technical writing. Skilled in reviewing and editing academic and technical content, ensuring clarity, and precision.

Programming Languages: Python, R, Bash, Perl & BioPerl.

Bioinformatics Tools: Kraken2, MetaPhlAn, MEGAHIT, Snakemake, Prokka, Jellyfish, BUSCO, and others.

Data Visualization: ggplot2, matplotlib.

High-Performance Computing: Slurm, Docker.

Soft Skills.

Attention to Detail: Meticulous in documenting technical reports and academic papers, ensuring accuracy.

Communication: Strong communication skills to collaborate with teams using appropriate data visualization techniques while remaining flexible enough for feedback from peers for readability.

Certifications and Relevant Coursework

| Certifications. | |
|--|------|
| Fundamentals: AI Fundamentals | 2024 |
| Fundamentals: Data Literacy | 2024 |
| Relevant Courses. | |
| Specialization: Biostatistics in Public Health | 2020 |
| Specialization: Genomic Data Science | 2024 |

Professional Development

Ongoing: Ensemble Methods in Python (Bagging, Boosting, Stacking)

Visualizing Geospatial Data in R

Introduction to AWS

Scripts and Workflows

Key Pipelines and Workflows: Developed bioinformatics pipelines and tools for metagenomics, data analysis, and tool management. Key projects include:

- O Automated workflows for sequence analysis, including trimming and taxonomic profiling with Kraken2.
- O Developed scripts for quality control, data validation, and visualizing bioinformatics data.